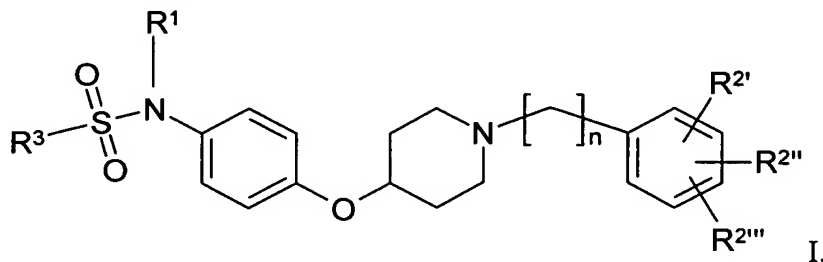


This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A compound of formula I



in which

- $R^1$  is H or A,  
 $R^{2'}$ ,  $R^{2''}$ ,  $R^{2'''}$  are each, independently of one another, H, A, OH, OCH<sub>3</sub>, OCF<sub>3</sub>, Hal, CN, COOR<sup>1</sup>, CONR<sup>1</sup> or NO<sub>2</sub>,  
 $R^3$  is A, Ar or A-Ar,  
 $R^4$  is H or A,  
A is unbranched or branched alkyl having 1-10 carbon atoms, in which one or two CH<sub>2</sub> groups may be replaced by O or S atoms and/or by -CH=CH- groups and/or 1-7 H atoms may be replaced by F,  
Ar is phenyl, naphthyl or biphenyl, each of which is unsubstituted or mono-, di- or trisubstituted by Hal, A, OR<sup>4</sup>, N(R<sup>4</sup>)<sub>2</sub>, NO<sub>2</sub>, CN, COOR<sup>4</sup>, CON(R<sup>4</sup>)<sub>2</sub>, NR<sup>4</sup>COA, NR<sup>4</sup>CON(R<sup>4</sup>)<sub>2</sub>, NR<sup>4</sup>SO<sub>2</sub>A, COR<sup>4</sup>, SO<sub>2</sub>N(R<sup>4</sup>)<sub>2</sub> or SO<sub>2</sub>A,  
A-Ar is arylalkyl, where A and Ar have one of the above-mentioned meanings,  
Hal is F, Cl, Br or I, and  
n is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10,  
or a pharmaceutically acceptable salt thereof.

2. (Previously Presented) A compound according to Claim 1, in which  $R^1$  is hydrogen.

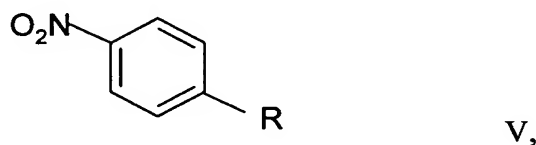
3. (Previously Presented) A compound according to Claim 1, in which  $R^{2'}$ ,  $R^{2''}$ ,  $R^{2'''}$  are hydrogen.

4. (Currently Amended) A compound according to claim 1, in which  $R^3$  is n-propyl, i-propyl, n-butyl, 2,2,2-trifluoroethyl, phenyl, benzyl or 2-nitrophenylmethyl.

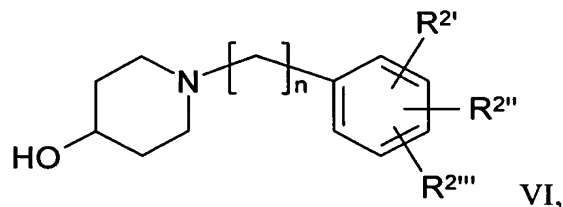
5. (Currently Amended) A compound according to claim 1, in which n is 1.

6. (Currently Amended) A compound according to Claim 1, which is N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-C-phenylmethanesulfonamide, N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-C-[2-nitrophenyl]methanesulfonamide, N-[4-(1-benzylpiperidin-4-yloxy)phenyl]benzenesulfonamide, N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-2-propanesulfonamide, N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-1-butanesulfonamide, N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-1-propanesulfonamide, or N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-1-2,2,2-trifluoroethanesulfonamide, or a pharmaceutically acceptable salt thereof.

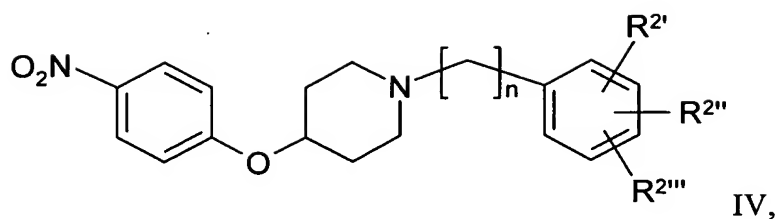
7. (Currently Amended) A process for preparing a compound of formula I according to claim 1 or a pharmaceutically acceptable salt thereof, comprising  
a) reacting a compound of formula V



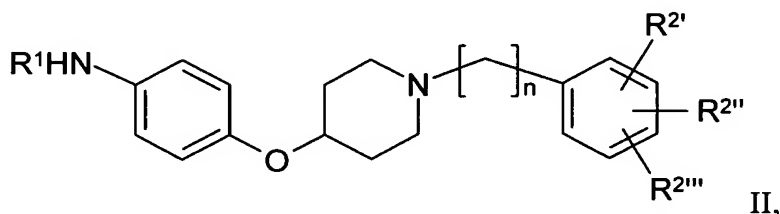
in which R is a nucleophilic leaving group suitable for nucleophilic substitution on an aromatic compound with a compound of formula VI



in which  $R^{2'}$ ,  $R^{2''}$ ,  $R^{2'''}$  and n are as defined for the compound of formula I, giving a compound of formula IV



b) converting the compound of formula IV by hydrogenation and optionally alkylation into a compound of formula II



in which R<sup>1</sup> is as defined for the compound of formula I, which is then

c) reacted with a compound of the formula III



in which R<sup>3</sup> is as defined for the compound of formula I, and L is a nucleophilic leaving group, giving a compound of formula I,

and optionally a protecting group is subsequently cleaved off,

and/or a base or acid of a compound of formula I is converted into one of its salts.

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Withdrawn and Currently Amended) A pharmaceutical composition comprising a compound of formula I according to claim 1, or a pharmaceutically acceptable salt thereof, [[5]] and a pharmaceutically acceptable excipient and/or adjuvant.

12. (Previously Presented) A pharmaceutical composition according to claim 11, further comprising at least one further pharmaceutically active ingredient.

13. (Withdrawn) A method for the prophylaxis or treatment of a disease in which the binding of a compound of formula I according to claim 1 or a pharmaceutically acceptable salt thereof to a nicotinic and/or muscarinic acetylcholine receptor leads to an improvement in the clinical picture comprising administering to a patient in need thereof an effective amount of the compound of formula I or a pharmaceutically acceptable salt thereof.

14. (Withdrawn) A method for the prophylaxis or treatment of schizophrenia, depression, an anxiety state, dementia, Alzheimer's disease, Lewy bodies dementia, a neurodegenerative disease, Parkinson's disease, Huntington's disease, Tourette's syndrome, a learning or memory impairment, age-related memory impairment, amelioration of withdrawal symptoms in nicotine dependence, stroke or brain damage by a toxic compound, comprising administering to a patient in need thereof an effective amount of a pharmaceutical composition according to claim 11.

15. (Cancelled)

16. (Previously Presented) A process for preparing a pharmaceutical composition according to claim 11, comprising converting said composition into a suitable dosage form together with at least one solid, liquid or semi-liquid excipient or adjuvant.

17. (Withdrawn) A set or kit comprising separate packs of  
(a) an effective amount of a compound of formula I according to claim 1 or a pharmaceutically acceptable salt thereof, and  
(b) an effective amount of a further pharmaceutically active ingredient.

18. (Withdrawn) A method for the prophylaxis or treatment of schizophrenia, depression, an anxiety state, dementia, Alzheimer's disease, Lewy bodies dementia, a neurodegenerative disease, Parkinson's disease, Huntington's disease, Tourette's syndrome, a learning or memory impairment, age-related memory impairment, amelioration of withdrawal symptoms in nicotine dependence, stroke or brain damage by a toxic

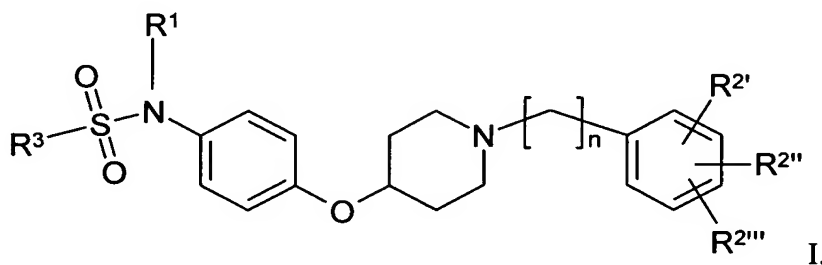
compound, comprising administering to a patient in need thereof an effective amount of a pharmaceutical composition according to claim 12.

19-20. (Cancelled)

21. (Previously Presented) An isolated stereoisomer of a compound of formula I according to claim 1.

22. (Previously Presented) A mixture of stereoisomers of a compound of formula I according to claim 1.

23. (Currently Amended) A compound of formula I



in which

$R^1$  is H or A,

$R^{2'}$ ,  $R^{2''}$ ,  $R^{2'''}$  are each, independently of one another, H, A, OH, OCH<sub>3</sub>, OCF<sub>3</sub>, Hal, CN, COOR<sup>1</sup>, CONR<sup>1</sup> or NO<sub>2</sub>,

$R^3$  is A, Ar or A-Ar,

$R^4$  is H or A,

A is unbranched or branched alkyl having 1-10 carbon atoms, in which one or two CH<sub>2</sub> groups may be replaced by O or S atoms and/or by -CH=CH- groups and/or 1-7 H atoms may be replaced by F,

Ar is phenyl, naphthyl or biphenyl, each of which is unsubstituted or mono-, di- or trisubstituted by Hal, A, OR<sup>4</sup>, N(R<sup>4</sup>)<sub>2</sub>, NO<sub>2</sub>, CN, COOR<sup>4</sup>, CON(R<sup>4</sup>)<sub>2</sub>, NR<sup>4</sup>COA, NR<sup>4</sup>CON(R<sup>4</sup>)<sub>2</sub>, NR<sup>4</sup>SO<sub>2</sub>A, COR<sup>4</sup>, SO<sub>2</sub>N(R<sup>4</sup>)<sub>2</sub> or SO<sub>2</sub>A,

A-Ar is arylalkyl, where A and Ar have one of the above-mentioned meanings,

Hal is F, Cl, Br or I, and

n is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10;  
~~or a pharmaceutically acceptable salt or solvate thereof.~~

24. (Cancelled)